

ABSTRACT

An apparatus for weighing a patient while the patient remains in bed including at least one flexible potentiometer mounted on top of a bed or mattress having a known compliance, *i.e.* known degree of flexure for a given weight, and connected to an electrical system for detecting and measuring the resistance of the potentiometer, so as to indicate the weight of the patient. The flexible potentiometer may also be adhered to a sheet of plastic, such as Mylar, and placed upon the bed like a protective sheet for the bed. The apparatus may include a multiple of flexible potentiometers. Further, the device to which the flexible potentiometer is connected may be used to help control servo mechanisms in medication dispensing devices such as infusion pumps and/or hemodialysis machines (artificial kidneys).